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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,507	12/13/2001	Paul Stewart Huxtable	PHIORM5.001AUS	5594

20995 7590 01/02/2004

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EXAMINER

OCAMPO, MARIANNE S

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 01/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/017,507	HUXTABLE ET AL.	
	Examiner	Art Unit	
	Marianne S. Ocampo	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET T MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 – 2, 5, 10, 14 – 15, 17 – 22 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Burrows (US 5,045,197).

3. Regarding claim 1, Burrows discloses a water purifying unit *including* (this transitional phrase has been considered to have the same open-ended meaning that a conventional transitional phrase “comprising” conveys):

- a head (12) having at least a first chamber (68) and a second chamber (defined by housing member 22 and/or 129), an inlet port (66), an outlet port (93) and a transfer port (91 or 90) between the first and second chambers all integrally formed within the head (12) so as to form a single unit, wherein each of the first and second chambers are arranged so that a sump (38, 40 or 42) can be removably secured thereto,

- a diverter (72 & 120 or 132) mounted within each of the first and second (or third) chambers, the diverter dividing its respective chamber into an inlet zone (outer peripheries/region of each diverter) and an outlet zone (inner hollow peripheries/region of the diverter) when in engagement with each discharge nipple of each corresponding filter/purifying cartridge, each diverter further being arranged such that a filter cartridge can be attached thereto (via its discharge nipple) and located within the associated sump and the head (12) is arranged so that water can enter the head, pass into the inlet zone of the first chamber (68), through the associated cartridge (50) and into the outlet zone (within and outside of discharge nipple 70), through the transfer port (91 or 90) located in the head, into the inlet zone of the second chamber (128 or 116), through the associate purifying cartridge (56 or 60) into the outlet zone (towards 142, 144 and out through faucet 22, or 102 through another post-filter/third cartridge and through 90) of the second chamber (128 or 116, respectively) and out through the outlet port (28, 142, 144 or 93, respectively) of the head, as in figs. 1 – 5 and cols. 1 – 9.

4. With regards to claim 2, Burrows has disclosed the limitations of claim 1 above. Burrows also discloses the head being molded from a plastic material, as in col. 4, lines 66 – 68 and col. 9, lines 11 – 12.

5. Concerning claim 5, Burrows has disclosed the limitations of claim 2 above. Burrows further discloses each diverted being molded from a plastic (same material forming the head 12) material, as in fig. 4 and col. 4.

6. Concerning claim 10, Burrows has disclosed the limitations of claim 1 above.

Burrows further discloses an inner wall of each chamber and its associated diverter being configured so that when they are formed/assembled together, the inner wall of the chamber and the diverter (they) define therebetween the inlet zone and the outlet zone, as in figs. 3 – 5.

7. Regarding claim 14, Burrows has disclosed the limitations of claim 1 above. Burrows also discloses at least one seal (75, 119 or 131) being provided between the diverter and an upper end (i.e. discharge nipple) of each cartridge to prevent water leakage therebetween, as in figs. 4 and cols. 5 – 8.

8. With respect to claim 15, Burrows has disclosed the limitations of claim 1 above. Burrows further discloses each sump (38, 40 or 42) being molded from a (lightweight) plastic material, as in col. 5, lines 8 – 10.

9. With regards to claim 17, Burrows has disclosed the limitations of claim 1 above. Burrows also discloses each sump (38, 40 or 42) being attached to the head (at portions 30, 22 or 22, as in fig. 5) by threaded connection, as in fig. 5 and col. 5, lines 1 – 15.

10. Concerning claim 18, Burrows has disclosed the limitations of claim 17 above. Burrows also discloses an upper inner wall of (each of) the sump (38, 40 or 42) including a

screw thread arranged to threadedly engage with a complimentary screw threads on a lower end portion (i.e. 30, 22 or 22) of (each of) the chamber to which it would be secured to, as in figs. 4 – 5 and col. 5, lines 12 - 15.

11. Regarding claim 19, Burrows has disclosed the limitations of claim 18 above. Burrows further discloses a seal (48) being provided between a lower end of each chamber and the associated sump to prevent water leakage, as in figs. 4 – 5 and col. 5, lines 15 - 19.

12. With respect to claim 20, Burrows has disclosed the limitations of claim 1 above. Burrows also discloses the sump (38, 40 or 42) being configured so that a cartridge (50, 54 or 60) can be secured to the respective diverter and then the sump can be connected to the head (12) about the cartridge, as in figs. 4 – 5 and col. 5.

13. With regards to claim 21, Burrows has disclosed the limitations of claim 1 above. Burrows further discloses clearance being provided between an inner wall of the sump and an outer surface of the cartridge to enable water to flow into the sump and through the cartridge, as in figs. 4 – 5.

14. Concerning claim 22, Burrows has disclosed the limitations of claim 1 above. Burrows also discloses (each of) the cartridge (50, 54 or 60) including an upper end cap, a lower

end cap, a fluid pathway (located at a central/inner region of each cartridge in communication with each discharge nipple) and a filter member (i.e. porous filtration fiber 50 or a reverse osmosis separating membrane 56 or an activated carbon filter tube 60) and the fluid pathway of (each of) the cartridge enabling water that has passed through the filter member to pass into the outlet zone (within and outside of each discharge nipple) of the chamber, as in figs. 3 – 5 and cols. 5 – 7.

15. Regarding claim 26, Burrows has disclosed the limitations of claim 1 above. Burrows also discloses a decorative cover (152) arranged to fit the head (12) to provide an improved aesthetic appearance to the unit, as in fig. 3 and col. 9.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 3, 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burrows in view of the article “Acrylonitrile-Butadiene-Styrene (ABS) Polymers”

(Encyclopedia of Polymer Science and Technology, copyright 2002 by John Wiley & Sons, Inc, article online posting date, October 22,2001, one page) and Hawley's Condensed Chemical Dictionary (Lewis Sr., Richard J., 13th edition, pages 3 and 888).

18. With respect to claims 3, 6, and 16, Burrows has disclosed the limitations of claims 2, 5 and 15, respectively above. Although Burrows does not disclose the type of plastic material used to mold the head & diverter and the sump, it is considered obvious to one of ordinary skill in the art at the time of the invention to modify/substitute the material of construction of the head & diverter, and the sump of the water purifying unit of Burrows, from any plastic material to specifically an ABS plastics (otherwise known as Acrylonitrile-Butadiene-Styrene polymers/thermoplastics/resins) for their known desirable properties which include excellent toughness, good dimensional stability and good chemical resistance, as mentioned in the article, under the heading "Introduction", **Acrylonitrile-Butadiene-Styrene (ABS) Polymers**" (Encyclopedia of Polymer Science and Technology, article online posting date 10-22-01) and in Hawley's Condensed Chemical Dictionary (Lewis Sr., Richard J., 13th edition, pages 3 and 888).

19. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burrows.

20. With respect to claim 4, Burrows has disclosed the limitations of claim 2 above. Burrows also discloses the transfer port (90 or 91) and the outlet port (93 or 144, 142) being

formed in the head (12) by a single molding drilling operation during the molding process, and not post molding. Claim 4 is an example of a product by process claim. The patentability of a product by process claim is based upon the product (in this instance, the transfer port and outlet port of the head of the water purifying unit) itself, even though the claim is limited and defined by process (i.e. formed by post molding drilling operation), and therefore, the product in such a claim is unpatentable if it is the same as, or obvious from the product of the prior art (that of Burrows in which the transfer port and the outlet port are formed during the molding process), even if the product of the prior art had been made by a different process. See *In re Thorpe, et al.*, No. 85-1913 (11-21-85) 227 USPQ pages 964 – 966. In this instance, the product (i.e. transfer and outlet ports) of Burrows is made/drilled during the molding process and not post molding, and despite the change in their process of making, the product of Burrows is considered to be the same if not an obvious variation of the claimed invention. Furthermore, the change in their process of making, does not change the end result (i.e. the unit of Burrows) or provide a significant feature which would deviate/teach away from the claimed invention, but in fact, provide the same, if not an obvious variation of the water purifying unit as thus claimed.

21. Regarding claim 7, Burrows has disclosed the limitations of claim 1 above. Burrows further discloses the diverter for each chamber being formed together and as a single structure with the head (12), with each respective chamber (which would include being pressed and adhered to the chamber). Although Burrows does not disclose the process of forming the diverter including shaping and pressing the diverter into a respective chamber and adhering to

the chamber using an adhesive, it is considered obvious to one of ordinary skill in the art that the diverter formed by the process of Burrows (i.e. single molding process creating the same single structure for the head and the diverter with its respective chamber) is considered to be the same and if not, an obvious variation of Burrow's diverter. Claim 7 is an example of a product by process claim. The patentability of a product by process claim is based upon the product (in this instance, the diverter being unitarily formed (by being adhered to) with the respective chamber and the head of the water purifying unit) itself, even though the claim is limited and defined by process (i.e. formed by shaping, pressing and adhering the diverter to a respective chamber), and therefore, the product in such a claim is unpatentable if it is the same as, or obvious from the product of the prior art (that of Burrows in which the diverter was formed during the molding process as a single structure with the respective chamber and the head), even if the product of the prior art had been made by a different process. See *In re Thorpe, et al.*, No. 85-1913 (11-21-85) 227 USPQ pages 964 – 966. In this instance, the change in the process of making of the diverter of Burrows/prior art does not change the end result/product being claimed (i.e. the water purifying unit having a single structure for the head and the diverter and the chamber it corresponds with).

22. Claims 8 – 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burrows in view of Koslow (US 5,685,981).

23. With respect to claim 8, Burrows has disclosed the limitations of claim 1 above.

Burrows fails to disclose the inner wall of each chamber and associated diverter include means for proper positioning the diverter in the associated chamber during assembly of the unit.

24. Koslow teaches a similar water purifying unit to that of Burrows, the unit (10, 12) of Koslow including at least one head (14) defining at least one inner chamber (18, 20) and further comprising a diverter (52) formed unitarily with a cartridge (76 or a filter element) for purifying water, the diverter (52) and an inner wall (22) of the chamber (20) including a means (including the threads 54 & grooves 62 & one right below 54) for proper positioning of the diverter in the chamber (20, 18) during assembly of the unit, as in figs. 6 – 7 and cols. 1 – 3.

It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the purifying unit of Burrows, by adding the embodiment taught by Koslow, in order to provide an improved and alternative design for the unit having a means for proper alignment and positioning of the cartridge & diverter into the head/chamber within the head of the filter/purifying unit, thereby preventing any leakage of water and providing an easy assembly and disassembly of the unit for either replacement or cleaning of the filter element (see cols. 1 – 3 of Koslow).

25. Concerning claim 9, Burrows, as modified by Koslow, has taught the limitations of claim 8 above. Koslow further teaches the positioning means including a complimentary indentation (found in the chamber 20) and protrusion(s) (formed in the diverter/plug portion of

the diverter & cartridge unit), as in figs. 6 – 7. The same motivation applied above, is applied here.

26. Claims 11 – 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burrows in view of Thomsen (US 5,653,871).

27. Concerning claim 11, Burrows has disclosed the limitations of claim 1 above. Burrows fails to disclose the diverter and the cartridge having complimentary bayonet type fitting means to enable the cartridge to be secured to the diverter.

28. Thomsen teaches a liquid (which could be water) purifying unit comprising a diverter (12, 18) and a cartridge (14), wherein the diverter (12) and the cartridge (14) having complimentary bayonet type fitting means (90) to enable the cartridge (14) to be secured to the diverter (12), as in figs. 1, 3 & 8 and cols. 2 – 4.

It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the purifying unit of Burrows, by adding the embodiment taught by Thomsen, in order to provide a secure and alternative means of attaching the cartridge to the diverter, thereby providing a structure which is quick to install/disassemble (see col. 4, lines 60 – 68 of Thomsen).

29. With respect to claims 12 – 13, Burrows, as modified by Thomsen, has taught the limitations of claim 11 above. Thomsen further teaches the diverter (12) including a centrally located bayonet aperture and the cartridge (14) including a bayonet fitting (90) at an upper end

thereof (claim 12), and the bayonet fitting of the cartridge being arranged to pass through the bayonet aperture whereafter the cartridge is rotated to positively locate the bayonet fitting within the diverter, as in figs. 1, 3 & 8. The same motivation applied above in claim 11 is being applied here.

30. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burrows in view of Gundrum et al. (US 6,436,282 B1).

31. Concerning claim 25, Burrows has disclosed the limitations of claim 1 above. Burrows fails to disclose the unit further including means for enabling the unit to be attached to a surface such as a side wall of a cupboard.

32. Gundrum et al. teach a purifying unit similar to that of Bailey et al., wherein the unit also includes a means for enabling the unit to be attached to a surface, in the form of two brackets having each an aperture therethrough formed in the head portion (21, 22) of the unit, wherein a screw, nail or clip or any type of hooking means on a side wall of a cupboard can be passed through the aperture and hold the unit to the side wall of the cupboard, as in fig. 2.

It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the purifying unit of Burrows, by adding the embodiment taught by Gundrum et al., in order to provide a means for storing and/or mounting the unit to a wall without having the unit occupy more space in a kitchen or faucet counter. With this design, the unit could be used

without taking up too much space in a small kitchen or be installed in an area where the faucet or water source has no available counter space to keep it in a standing position.

33. Claims 23 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burrows in view of Wilhelm (US 3,076,550).

34. Concerning claims 23 - 24, Burrows has disclosed the limitations of claim 22 above. Burrows fails to disclose the lower end cap of the cartridge having at least a pair of protrusions spaced peripherally thereabout and arranged to restrict or prevent side to side movement of a lower end of the cartridge when high water pressure loads are applied to the cartridge (claim 23), wherein the protrusions take the form of triangular shaped wings extending outwardly of the cartridge (claim 24).

35. Wilhelm teaches a filter cartridge (42) disposed within a sump (45) of a purifying unit (10), the cartridge having a lower end cap (43) having at least a pair of protrusions (44) spaced peripherally thereabout and extending outwardly from a lower end of the cartridge (42) and capable of restricting or preventing side to side movement of a lower end of the cartridge (42) when high water pressure loads are applied to the cartridge, as in fig. 1 and col. 2. Although Burrows, as modified by Wilhelm, does not teach the protrusions having or taking the form of triangular shaped wings (claim 24), it is considered obvious to one of ordinary skill in the art to modify the shape of the protrusions to any suitable or desired shape as a matter of choice of the manufacturer. The case law, *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966), provided

(The court held) that the configuration/shape of the claimed invention (in this instance, those protrusions at a lower end cap) was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed invention was significant. Since there is no persuasive evidence found in the specification provided by the applicants regarding the importance or significance of triangular shaped wings for the protrusions, the examiner considered that the protrusions taught by Burrows, as modified by Wilhelm, are the same or serve the same purpose as those in the claimed invention.

Response to Arguments and Amendments

36. Applicants' arguments and amendments with respect to claims 1 - 26 have been considered but are moot in view of the new grounds of rejection. Applicants' amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Conclusion

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne S. Ocampo whose telephone number is (703) 305-1039. The examiner can normally be reached on Mondays to Fridays from 8:00 A.M. to 4:30 P.M..

38. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (703) 308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

39. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


M.S.O.


W. L. WALKER
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